

## **REMARKS**

Pending claims 11-22, 24, 35-46 and 48 have been cancelled without prejudice or disclaimer. Applicants reserve the right to file one or more continuation or divisional applications directed to the cancelled subject matter. New claims 49-60 have been added. No new matter has been added by this amendment. The following addresses the rejections set forth in the June 18, 2009 Office Action. Entry and consideration is respectfully requested.

Claims 35-46 and 48 of a targeting an inheritable integration of a transgene into the genome of a vertebrate organism has been cancelled. Applicants reserve the right to file one or more continuation or divisional applications directed to the cancelled subject matter pertaining to those claims.

The rejection of claims 11-22, 24, 35-46, as it now pertains to the new claims 49-60 is respectfully traversed.

### **Rejection of Claims 21 and 45 Under 35 U.S.C. §112, 1<sup>st</sup> and 2<sup>nd</sup> paragraph**

The Examiner rejected claims 21 and 45 under 35 U.S.C. §112, first paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Additionally the Examiner rejected claims 21 and 45 for being unclear under 35 U.S.C. §112, second paragraph. Inasmuch as those claims have been cancelled, the rejection is moot.

### **Rejection of Claims 11-22, 24, 35-46 and 48 Under 35 U.S.C. §112 2<sup>nd</sup> paragraph**

The Examiner rejected claims 11-22, 24, 35-46 and 48 under 35 U.S.C. §112, second paragraph, stating that the language is unclear. Applicants have amended those claims to be reflected in new claims 49-60. This contention is respectfully traversed.

As the amended, new independent claim 49, the claim now recites the following:

“a first DNA cassette a first DNA cassette carrying a first transposon half side at one end, a second transposon half side in opposite orientation at the other end, a first wild-type/non-mutated recombinase target site, and a mutated second heterospecific recombinase target site, wherein the recombinase target sites are flanked between said transposon half-sides...”

“a second DNA cassette carrying the same target recombinase sites in the same orientation of said first DNA cassette, an internal transposon half side flanked by said target recombinase sites in the same orientation as said second transposon half side, and a transgene positioned between said internal half side and second recombinase site with the exchange mediated by a site-specific recombinase that catalyzes a DNA recombination reaction via homospecific recombinase target sites...”

Additionally, the step of “identifying that said transgene has been integrated into said genome” has been included in claim 49.

Applicants submit that the steps of identifying that the transgene has been integrated into the genome relates the process the heritable integration of the transgene is achieved. Specifically, Page 25 and 26 of the Specification under the heading of: “Step 1: Targeted DNA cassette exchange (RMCE, Step 1 in Fig. 5 and Fig. 7)” describes steps of identifying that the transgene has been integrated.

Thus, present claims 49-60 application adequately describes the claimed invention. Applicants thus respectfully request favorable reconsideration and withdrawal of the rejection under 35 U.S.C. § 112.

In the event that the Office maintains this rejection, Applicants respectfully request, in the interest of its policy of compact prosecution, that the Office explain how the aforementioned

portions of the present application fail to communicate to a skilled artisan that Applicants possessed the claimed invention.

In view of the foregoing, it is respectfully submitted that claims 49-60 define allowable subject matter. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Dated: October 19, 2009

Respectfully submitted,

/Albert Y. Tsui/

Albert Y. Tsui  
PTO Registration No. 51,066  
USDA-ARS-OTT  
1815 N. University Street  
Peoria, Illinois 61604  
309.681.6512